

# Eric J. Landquist

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## Education

- Ph.D. Mathematics, University of Illinois, Expected: Summer, 2008.  
Dissertation: *Arithmetic and Class Number Computation in Cubic Function Fields*
- M.S. Mathematics, Virginia Tech, 2000.  
Thesis: *On Nonassociative Division Rings and Projective Planes*
- B.S. Mathematics (Applied Discrete Mathematics Option), *Summa Cum Laude*  
Minor: Computer Science, Virginia Tech, 1998.

## Positions Held

- Research Assistant and Teaching Assistant, University of Illinois, Fall, 2001 to Present.
- Part-Time Faculty, Parkland College (Champaign, IL), Summer, 2007.
- Visiting Researcher, University of Calgary, August, 2004 and January-July, 2005.
- Adjunct Faculty, New River Community College (Dublin, VA), Fall, 2000 to Summer, 2001.
- Cryptologic Mathematician, Director's Summer Program, National Security Agency (Ft. Meade, MD), Summer, 1999.
- Graduate Teaching Assistant, Virginia Tech (Blacksburg, VA), Spring, 1999 to Summer, 2000.

## Teaching Experience

- University of Illinois
  - Multivariable Calculus and Mathematica (Spring, 2006; Spring, 2007; Fall, 2007)
  - Multivariable Calculus (Fall, 2002; Spring, 2004; Fall 2004; Fall, 2006)
  - Calculus II (Fall, 2003)
  - Numeracy (Fall, 2001)
- Parkland College
  - Statistics (Summer, 2007)
- New River Community College
  - Arithmetic, Pre-algebra (Summer, 2001)
  - Differential Equations, Calculus II, Vector Geometry (Spring, 2001)

- Algebra, Geometry (Fall, 2000)
- Virginia Tech
  - Vector Geometry (Summer, 2000; Spring, 2000)
  - Calculus (Fall, 2000)
  - Precalculus (Spring, 1999)

### Conference Talks

- *Class Number Computation in Cubic Function Fields*. West Coast Number Theory Conference; Pacific Grove, CA; December 19, 2007.
- *Class Number Computation in Cubic Function Fields*. Midwest Number Theory Conference for Graduate Students; Madison, WI; November 3, 2007.
- *The Splitting of Primes in  $\mathbb{F}_q(x)[y]/(y^3 - Ay + B)$* . Midwest Number Theory Conference for Graduate Students; Urbana, IL; October 28, 2006.
- *The Splitting of Primes in  $\mathbb{F}_q(x)[y]/(y^3 - Ay + B)$* . Rocky Mountain Mathematics Consortium; Laramie, WY; July 6, 2006.
- *The Multipolynomial Number Field Sieve*. IMA PI Summer Program for Graduate Students: Coding and Cryptography, South Bend, IN; June 25, 2004.

### Honors, Awards, and Fellowships

- Departmental TA Instructional Award, University of Illinois Mathematics Department (2007)
- Incomplete List of Instructors Rated Excellent by their Students, University of Illinois (Fall, 2001; Spring and Fall, 2004; Spring and Fall, 2006)
- VIGRE Fellowship (Summer, 2003 and Fall, 2005)
- Hohn-Nash Award for scholarship in Applied Mathematics (co-recipient), University of Illinois Mathematics Department (2002)
- Outstanding Senior in Applied and Discrete Mathematics (co-recipient), Virginia Tech (1998)

### Papers in Progress

- E. Landquist, P. Rozenhart, R. Scheidler, J. Webster and Q. Wu, *Integral bases and signatures of cubic function fields with applications*. Accepted pending revisions, *Canadian Journal of Mathematics*, 2007.
- *Class number computation in cubic function fields* (with R. Scheidler and A. Stein)
- *Arithmetic in the Jacobian of a cubic function field* (with M. Bauer and R. Scheidler)

### Service

- Teaching Awards Committee, University of Illinois (2008)
- Organizer, Computational Number Theory Seminar, University of Illinois (2003-2004)